



12-11-06

EXPRESS MAIL NO. EV889151584US

Law

**TRANSMITTAL  
FORM**(To be used for all correspondence  
after initial filing)

Application Number	10/811,310
Filing Date	March 26, 2004
First Named Inventor	Jeffrey J. Berkley
Art Unit	2629
Examiner Name	Alexander Eisen
Attorney Docket No.	660119.401

**ENCLOSURES (check all that apply)**

- |  |  |  |
|--|--|--|
| <input checked="" type="checkbox"/> Fee Transmittal Form                             | <input type="checkbox"/> Drawing(s)  | <input type="checkbox"/> After Allowance Communication to TC                                     |
| <input checked="" type="checkbox"/> Fee Attached                                     | <input type="checkbox"/> Request for Corrected Filing Receipt                            | <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences              |
| <input type="checkbox"/> Amendment/Response  | <input type="checkbox"/> Licensing-related Papers  | <input type="checkbox"/> Appeal Communication to TC ( <i>Appeal Notice, Brief, Reply Brief</i> ) |
| <input type="checkbox"/> After Final   | <input type="checkbox"/> Petition  | <input type="checkbox"/> Proprietary Information   |
| <input type="checkbox"/> Affidavits/declaration(s)                                   | <input type="checkbox"/> Petition to Convert to a Provisional Application                | <input type="checkbox"/> Status Letter   |
| <input type="checkbox"/> Extension of Time Request                                   | <input type="checkbox"/> Power of Attorney, Revocation, Change of Correspondence Address | <input checked="" type="checkbox"/> Return Receipt Postcard                                      |
| <input type="checkbox"/> Express Abandonment Request                                 | <input type="checkbox"/> Declaration   | <input type="checkbox"/> Other Enclosure(s) ( <i>please identify below</i> ):                    |
| <input checked="" type="checkbox"/> Information Disclosure Statement and Transmittal | <input type="checkbox"/> Statement under 37 CFR 3.73(b)                                  | _____  |
| <input checked="" type="checkbox"/> Cited References                                 | <input type="checkbox"/> Terminal Disclaimer   | _____  |
| <input type="checkbox"/> Certified Copy of Priority Document(s)                      | <input type="checkbox"/> Request for Refund  | _____  |
| <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53         | <input type="checkbox"/> CD, Number of CD(s) _____                                       | _____  |
| <input type="checkbox"/> Response to Missing Parts/Incomplete Application            | <input type="checkbox"/> Landscape Table on CD   | _____  |

Remarks

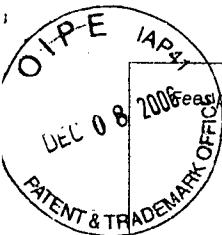
**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Name	Seed Intellectual Property Law Group PLLC	Customer Number	00500
Signature			
Printed Name	Harold H. Bennett II		
Date	December 8, 2006	Reg. No.	52,404

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Signature		
Typed or printed name		Date:



Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

**FEE TRANSMITTAL**  
**For FY 2006****Complete if Known**

Application Number	10/811,310
Filing Date	March 26, 2004
First Named Inventor	Jeffrey J. Berkley
Examiner Name	Alexander Eisen
Art Unit	2629
Attorney Docket No.	660119.401

☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$)**180****METHOD OF PAYMENT** (check all that apply)

- ☒ Check ☐ Credit Card ☐ Money Order ☐ Other (please identify): \_\_\_\_\_
- ☒ Deposit Account Deposit Account Number: 19-1090 Deposit Account Name: Seed IP Law Group PLLC
- For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)
- ☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee
- ☐ Charge any additional fee(s) or underpayments ☒ Charge any underpayments or credit any overpayments of fee(s) under 37 CFR 1.16 and 1.17

Warning: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**FEE CALCULATION** (All the fees below are due upon filing or may be subject to a surcharge.)**1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	_____
Design	200	100	100	50	130	65	_____
Provisional	200	100	0	0	0	0	_____

**2. EXCESS CLAIM FEES**

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dependent Claims
_____ -20 or HP = _____	X	_____	_____	Fee (\$)
HP = highest number of total claims paid for, if greater than 20.				Fee Paid (\$)

Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
_____ -3 or HP = _____	X	_____	_____

HP = highest number of independent claims paid for, if greater than 3.

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)) the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
_____ -100 = _____	/50 = _____	(round up to a whole number) x _____	_____	_____

**4. OTHER FEE(S)**

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): Information Disclosure Statement Submission Fee**180****SUBMITTED BY**

Signature		Registration No. (Attorney/Agent)	52,404	Telephone	206-622-4900
Name (Print/Type)	Harold H. Bennett II	Date	December 8, 2006		



PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Jeffrey J. Berkley et al.  
Application No. : 10/811,310  
Filed : March 26, 2004  
For : METHOD, APPARATUS, AND ARTICLE FOR FORCE  
FEEDBACK BASED ON TENSION CONTROL AND TRACKING  
THROUGH CABLES



Examiner : Alexander Eisen  
Art Unit : 2629  
Docket No. : 660119.401  
Date : December 8, 2006

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

12/11/2006 BARRAHAI 00000025 10811310  
01 FC:1806 180.00 DP

INFORMATION DISCLOSURE STATEMENT TRANSMITTAL

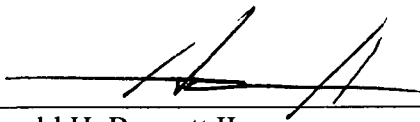
Commissioner for Patents:

In accordance with 37 CFR 1.56 and 1.97 through 1.98, applicants wish to make known to the U.S. Patent and Trademark Office the references set forth on the attached Information Disclosure Statement. Copies of cited U.S. patents and published patent applications are not required and accordingly have not been provided. Copies of any other cited references are enclosed. As to any reference cited, applicants do not admit that it is "prior art" under 35 U.S.C. §§ 102 or 103, and specifically reserve the right to traverse or antedate any such reference, as by a showing under 37 CFR 1.131 or other method. Although the aforesaid references are made known to the Patent and Trademark Office in compliance with applicants' duty to disclose all information they are aware of which is believed relevant to the examination of the above-identified application, applicants believe that their invention is patentable.

Please acknowledge receipt of this Information Disclosure Statement and kindly make the cited references of record in the above-identified application.

A fee of \$180 is submitted in accordance with 37 CFR 1.97(c). The Director is authorized to charge any other fees which may be required, or credit any overpayment to Deposit Account No. 19-1090.

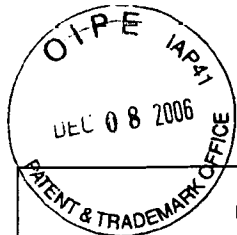
Respectfully submitted,  
Seed Intellectual Property Law Group PLLC

  
\_\_\_\_\_  
Harold H. Bennett II  
Registration No. 52,404

HHB:wt  
Enclosures:  
    Check  
    Information Disclosure Statement  
    Cited References (13)

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EXPRESS MAIL NO. EV889151584US

Sheet 1 of 2U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

660119.401

APPLICATION NO.

10/811,310

## INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANTS

Jeffrey J. Berkley et al.

FILING DATE

March 26, 2004

GROUP ART UNIT

2629

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
/asb/	AA	5,305,429	04/19/94	Sato et al.	395	119	
	AB	5,389,865	02/14/95	Jacobus et al.	318	568.11	
	AC	5,576,727	11/19/96	Rosenberg et al.	345	179	
	AD	5,577,981	11/26/96	Jarvik	482	4	
	AE	5,587,937	12/24/96	Massie et al.	364	578	
	AF	5,709,219	01/20/98	Chen et al.	128	782	
	AG	5,828,813	10/27/98	Ohm	395	95	
	AH	6,281,651	08/28/01	Haanpaa et al.	318	568.11	
	AI	6,413,229	07/02/02	Kramer et al.	600	595	
	AJ	6,417,638	07/09/02	Guy et al.	318	560	
↓	AK	6,630,923	10/07/03	Sato	345	156	
/asb/	AL	2001/0038376	11/08/01	Sato	345	156	

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION	
					YES	NO
	AM					

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

/asb/	AN	"The Phantom Haptics Interfaces: A Device for Probing Virtual Objects," SensAble Technologies, <a href="http://www.sensable.com/community/asme.htm">http://www.sensable.com/community/asme.htm</a> , download date of November 16, 2006. (The Phantom Arm '93).
/asb/	AO	"Industrial Controls", Immersion Corporation, <a href="http://www.immersion.com/industrial/joystick/impulse_engine.php">http://www.immersion.com/industrial/joystick/impulse_engine.php</a> , download date of November 16, 2006.
/asb/	AP	"CyberGrasph <sup>TM</sup> Exoskeleton" Immersion Corporation – 3D Interaction: Products, <a href="http://www.immersion.com/3d/products/cyber_grasph.php">http://www.immersion.com/3d/products/cyber_grasph.php</a> , download date of November 16, 2006.

EXAMINER

/Alexander S. Beck/

DATE CONSIDERED

09/15/2010

\* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  <b>INFORMATION DISCLOSURE STATEMENT</b> (Use several sheets if necessary)	ATTY. DOCKET NO. 660119.401	APPLICATION NO. 10/811,310
	APPLICANTS Jeffrey J. Berkley et al.	
	FILING DATE March 26, 2004	GROUP ART UNIT 2629

### U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
BA						

### OTHER PRIOR ART *(Including Author, Title, Date, Pertinent Pages, Etc.)*

/asb/	BC	CyVerse Corp., "Spidar (CyDar) Incormation", <a href="http://www.cyverse.co.jp/eng/">http://www.cyverse.co.jp/eng/</a> and <a href="http://www.cyverse.co.jp/Products/spidar.html">http://www.cyverse.co.jp/Products/spidar.html</a> , download dates of November 16, 2006.
	BD	Jackson et al., "Force Feedback and Medical Simulation," Interactive Technology and the New Paradigm for Healthcare, IOS Press and Ohmsha, 1995, pp. 147-151.
	BE	Kim et al., "Haptic Interface with 7 DOF Using 8 Strings: SPIDAR-G," ICAT2000, 25-27, October 2000, National Taiwan University, Tawain, 7 pages.
	BF	Kim et al, "Design of a Tension Based Haptic Interface SPIDAR-G," 4 <sup>th</sup> World Multiconference on Systemics, Cybernetics and Informatics (SCI2000) and the 6 <sup>th</sup> Internation Conference on Information Systems Analysis and Synthesis (ISAS2000), Orando, FL, USA, in July 23-26, 2000, 6 pages.
	BG	Kim et al., "Development of Tension Based Haptic Interface and Possibility of its Application to Virtual Reality," VRST2000, October 22-25, 2000, Seoul, Korea, pp. 199-205.
	BG	Kim et al., "Design of a Tension Based Haptic Interface SPIDAR-G," IMECE2000 (joint with ASME2000), DSC-Vol 69-2, Proceedings of the ASME, November 5-10, 2000, Orlando, FL, USA, 4 pages.
	BH	Kim et al., "'Cutting Edge' Force-Feedback Device : SPIDAR-G," Proceedings of the 32 <sup>nd</sup> ISR (International Symposium on Robotics), April 19-21, 2001, Seoul, Korea, pp. 1771-1776.
	BI	Kim et al., "Tension Based 7-DOF Force Feedback Device: SPIDAR-G," Proceedings of the IEEE Virtual Reality 2002, March 24-28, 2002, Orlando, FL, USA, 2 pages.
	BJ	Kim et al., "Tension Based 7 DOFs Force Feedback Devices: SPIDAR-G," Transactions on Control, Automation, and Systems Engineering Vol. 4, No. 1, March 2002, pp. 9-16.
/asb/	BK	Kim et al., "A Novel Seven Degree of Freedom Haptic Device for Engineering Design," Journal of Virtual Reality, Springer-Verlag London Ltd., UK, 2003, pp. 217-228.

EXAMINER /Alexander S. Beck/	DATE CONSIDERED 09/15/2010
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\* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).